REMARKS

Reconsideration of the above-identified application in view of the amendments above and the remarks following is respectfully requested.

Claims 1 - 102 are in this Application. Claims 2 – 35, 40 – 46, 50 – 75, 78, 79, and 83 – 102 have been withdrawn from consideration. Claims 1, 36 – 38, 47 – 49 76 – 77, 80 and 81 have been rejected under 35 U.S.C. § 102. Claims 39 and 82 have been rejected under 35 U.S.C. § 103. Claims 1 and 76 have been amended herewith.

Amendments To The Claims

35 U.S.C. § 102 Rejections

Claims 1 and 76 have been amended to teach that the waveform is *continuous* and is *modulated* to be decodable to give the position.

Kitada US 6,798,403 teaches an ultrasonic system for position detection.

Kitada fails to teach that the waveform is *continuous*. On the contrary, Kitada teaches that "ultrasonic waves and light are transmitted by the stylus 101 having the ultrasonic vibration element 301 at predetermined periods" Kitada Col. 3 lines 43 to 45. See also column 5 lines 45 – 59 where the comparator presupposes that the signal is not continuous. That is to say the thresholding would only produce a timing signal if the original ultrasound were discontinuous. If it were continuous then the thresholding would just lead to another regular waveform.

Kitada fails to teach that the information is added to a continuous waveform by *modulation*. In other words, what the present claim seeks to define is an ultrasound carrier wave which is continuous and onto which data (the position information) is modulated. Such has been done for many years with radio signals but applicant is the first to use a carrier and modulation with an ultrasound signal, certainly the first to do such a thing for ultrasound based positioning. All existing ultrasound positioning systems use discontinuous pulses, which themselves are the positioning information.

The advantages of using a continuous signal with modulation are inter alia first that greater accuracy is possible since the encoding can be more sophisticated. Secondly different devices can work in proximity since they can select non-interfering

coding. In the existing art it is not possible to have two ultrasound positioning devices working in proximity.

The same amendment has been made to claim 76, so that this too recites a continuous waveform which is modulated.

The remaining claims are believed to be allowable as being dependent on allowable main claims.

The independent claims are believed to be generic to all of the species.

In view of the above amendments and remarks it is respectfully submitted that the rejected claims are now in condition for allowance. A prompt notice of allowance is respectfully and earnestly solicited.

Respectfully submitted,

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Date: November 10, 2008

Enclosures:

- Petition for Extension (One Month)